

## REMARKS

Claims 1-19 are pending in the present application.

Claims 1,5 and 17-19 have been amended.

Claims 1-19 are believed to be in condition for allowance for the reasons set forth herein.

### Claim Rejections - 35 USC § 112

Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 1 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 1, 5, 17, 18 and 19 are amended herein. The rejections are rendered moot by amendment.

The amendments are clearly supported and no new matter is added.

The claims were previously amended to state "hydrolyzed copolymer of vinylacetate and silane monomer" in an response dated October 23, 2003 with supporting documentation sufficient to convince the Examiner that the term "silanol modified polyvinyl alcohol" is known in the art to refer to a

"hydrolyzed copolymer of vinylacetate and silane monomer". The Applicants have received multiple actions and filed multiple responses since then without any suggestion by the Office that this definition is problematic. The claims as presented before, and after, this action are clearly supported by the specification and one of skill in the art would realize that the two phrases used in the claims recite the same material.

#### Further Comments

As a basis for discussion Applicants will summarize the prosecution history.

In an Office Communication dated June 18, 2002 the Examiner introduced Mochizuki and argued that silica or silicate particles dispersed in a cation-modified polyvinyl alcohol inherently produce silanol modified polyvinyl alcohol. Applicants have, and continue to, disagree with this position. As further support of this position Applicants remind the Examiner that silica is defined as:

"the chemically resistant dioxide  $\text{SiO}_2$  of silicon that occurs naturally in the three crystalline modifications of quartz, tridymite, and cristobalite, in amorphous and hydrated forms (as opal) and in less pure forms (as sand, diatomite, tripoli) and combined in silicates . . . " Webster's Third New International Dictionary Of the English Language Unabridged, Copyright, 1981 by G&C Merriam Co. ISBN 0-87779-201-1.

Applicants respectfully request that the Examiner produce evidence for the position that mixing silica and polyvinyl alcohol inherently produces silanol modified polyvinylalcohol as that term is widely know to be used in the art as evidenced by the references already submitted by Applicants.

The Examiner argues that over the course of prosecution art has been applied that contains silanol modified polyvinyl alcohol and hydrolyzed vinylacetate in an attempt to meet the amended claim. These efforts have failed. The Examiner has ignored the clear teaching in the art that the term "silanol modified polyvinyl alcohol" is defined as a hydrolyzed copolymer of vinylacetate and silane monomer. The Examiner has continually considered the mixture of silica with polyvinyl to be an equivalent which is improper.

#### Newly Cited Art

The Examiner cites references which are thought to teach the manufacturing process of silanol modified polyvinyl alcohol.

U.S. Pat. No. 6,838,137 recites silanol modified polyvinyl alcohol, at col. 8, lines 53-54, as a commonly known material but does not describe how it is made. U.S. Pat. 6,838,137 is redundant with U.S. Pat. No. 5,989,378.

U.S. Pat. No. 6,432,519 teaches silanol modified polyvinyl alcohol as a known material at col. 3, lines 52-60.

U.S. Pat. No. 6,346,570 describes silyl modified PVA which is formed by hydrolysis.

U.S. Pat. No. 5,496,634 recites silyl-modified polyvinyl alcohol but fails to mention how it is obtained.

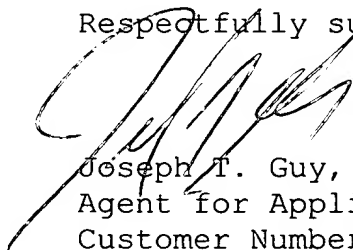
U.S. Pat. No. 4,097,436 recites the copolymer of vinylacetate and vinylalkoxysilane. The copolymer is hydrolyzed.

Applicants respectfully disagree with the position of the Examiner that the references cited provide different ways to form silanol modified PVA.

#### **CONCLUSIONS**

Claims 1-19 are pending. All claims are believed to be in condition for allowance. Notice thereof is respectfully requested.

Respectfully submitted,



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